LAKE: OSSIPEE FLOWAGE(LIT) (VLMP 31)
TOWN: WATERBORO
COUNTY: YORK

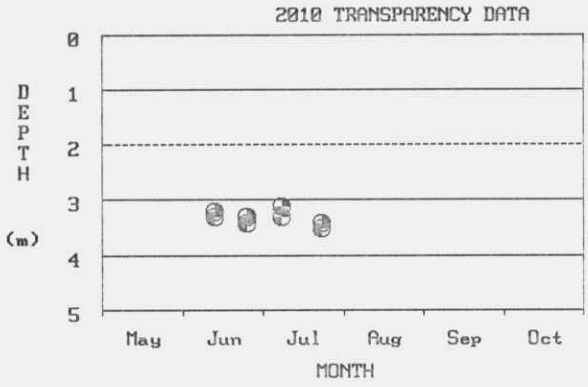
MIDAS: 9715
TRUE BASIN: 1
SAMPLE STATION: 1

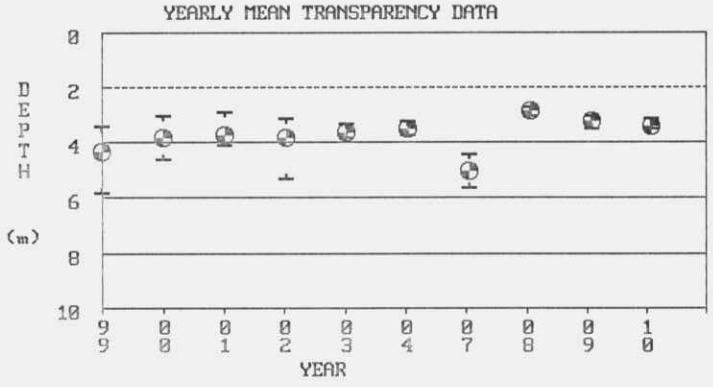
WHOLE LAKE INFORMATION
MAX. DEPTH: 8 m. (25 ft.)
MEAN DEPTH: 2 m. (6 ft.)
DELORME ATLAS #: 02
USGS QUAD: LIMINGTON
IFW REGION A: Sebago Lake (Gray)
IFW FISH. MANAGMENT: Warmwater

TRUE BASIN CHARACTERISTICS
SURFACE AREA: Undetermined
FLUSHING RATE: Undetermined
VOLUME: Undetermined
DIRECT DRAINAGE AREA: Undetermined

PLEASE NOTE THE FOLLOWING: The SAMPLE STATION # refers to the location sampled. The term TRUE BASIN is used to define areas within a lake that are separated by shallow reefs or shoals and therefore function as separate lakes. There are approximately 50 lakes in the state that have more than 1 True Basin. True Basin Characteristics are now being included in the first section of these reports to enable users of the Phosphorous Loading Methodology to better evaluate the data. If there is no data for a particular True Basin, True Basin Characteristics must be obtained from the DEP. OSSIPEE FLOWAGE(LIT) has 1 True Basin.

SECCHI DISK TRANSPARENCY GRAPHS:





Note: 2010 graphs may indicate multiple readings taken on a given day.

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

[* indicates that Secchi disk was visable at bottom of lake (or one reading used in calculation was visable)].

	MEAN COLOR (SPU)	MEAN pH	MEAN ALK (mg/l)	MEAN COND. (uS /cm)	TOTAL PHOS. MEANS (ppb) EPI CORE	SURF GRAB	BOT. GRAB	PRO. GRAB	SECCHI DISK (m.) MIN.	MEAN	MAX.	N	CHLOROPHYLL A(ppb) MIN.	MEAN	MAX.	TROPHIC STATE INDICES EPI PHOS C	G	SEC	CHL
1999	-	-	-	-	-	-	-	-	3.4	4.3	5.8	5	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-	3.0	3.8	4.6	6	-	-	-	-	-	-	-
2001	42	6.87	10.0	54	9	-	-	10	2.9	3.7	4.1	6	3.1	3.1	3.1	-	-	-	-
2002	-	-	-	-	-	-	-	-	3.1	3.8	5.3	6	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	3.3	3.6	3.8	6	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-	3.2	3.5	3.7	5	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	4.4	5.0	5.6	4	-	-	-	-	-	-	-
2008	80	6.99	9.6	52	14	-	-	-	2.7	2.8	3.0	1	6.1	6.1	6.1	-	-	-	-
2009	-	-	-	-	-	-	-	-	3.0	3.2	3.5	4	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	3.1	3.4	3.5	2	-	-	-	-	-	-	-
SUMMARY:	61	6.93	9.8	53	12	-	-	10	2.7	3.7	5.8	10	3.1	4.6	6.1	-	-	-	-

LAKE: OSSIPEE FLOWAGE(LIT) (VLMP 31) MIDAS: 9715
TOWN: WATERBORO *TRUE BASIN: 1
COUNTY: YORK *SAMPLE STATION: 1

LATE SUMMER TEMPERATURE / DISSOLVED OXYGEN PROFILES:

	SAMPLE DATE											
DEPTH	08/10/01		08/19/08		08/25/08		09/10/08		08/20/09		09/15/09	
m	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm
0.0	28.7	7.4	22.8	8.0	24.4	9.2	22.5	7.4	28.5	9.7	22.0	8.3
1.0	28.7	7.4	22.8	7.9	24.2	9.0	22.5	7.3	28.4	9.5	21.8	8.3
2.0	28.6	7.2	22.6	7.9	23.7	9.0	21.2	7.2	27.2	9.2	20.8	7.5
3.0	24.7	5.0	20.6	6.3	21.4	8.5	21.0	7.0	25.2	8.8	20.3	7.4
4.0	23.3	3.5	19.9	5.3	20.4	8.5	20.9	6.8	24.8	7.5	19.4	7.3
5.0	22.6	3.2	19.6	5.4	20.1	7.1	15.8	4.2	22.9	7.0	18.7	7.2
6.0	21.7	1.1	19.1	5.3	-	-	-	-	22.3	6.5	18.5	6.6

WATER QUALITY SUMMARY

LITTLE OSSIPEE FLOWAGE (LAKE ARROWHEAD), WATERBORO
Midas: 9715, Station: 01 - Primary

The Maine Department of Environmental Protection (ME-DEP) and the Volunteer Lake Monitoring Program (VLMP) have collaborated in the collection of lake data to evaluate water quality, track algal blooms, and determine water quality trends. This dataset does not include bacteria, mercury, or nutrients other than phosphorus.

Water quality monitoring of Lake Arrowhead started in 1999. During this period, 1 year of basic chemical information was collected, in addition to 6 years of Secchi Disk Transparencies (SDT). In summary, the water quality of Lake Arrowhead is considered to be below average, based on measures of SDT, total phosphorus (TP) and Chlorophyll-a (Chla). The potential for nuisance algal blooms on Lake Arrowhead is low.

Water Quality Measures: Lake Arrowhead is a moderately colored lake (average color 42 SPU) with and average SDT of 3.8 m (12.5 ft). The water column TP for Lake Arrowhead is 9 parts per billion (ppb) while Chla is 3.1 ppb. The only dissolved oxygen (DO) profile - taken in 2001 - shows little DO depletion in deep areas of the lake. The potential for TP to leave the bottom sediments and become available to algae in the water column (internal loading) is low. Lake Arrowhead is managed by the Maine Department of Inland Fish and Wildlife as a warm-water fishery.

Lake Arrowhead is one of the few lakes in Maine that is licensed for hydropower generation. The invasive aquatic plant variable-leaf milfoil is found throughout the lake. The local association has been conducting Courtesy Boat Inspections for 4 years and works to manage the spread of variable-leaf milfoil within the lake.

See ME-DEP Explanation of Lake Water Quality Monitoring Report for measured variable explanations. Additional lake information can be found on the Internet at http://www.lakesofmaine.org/ and/or http://www.maine.gov/dep/blwq/lake.htm, or telephone the ME-DEP at 207-287-3901 or the VLMP at 207-783-7733.

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